

## IN THE CLAIMS

Claims 1-4, 9, 12, 19, 25, 28-30, and 33-35 are amended herein. Claim 18 is cancelled herein. Claims 36-47 have been added. All pending claims are reproduced below.

1. (Currently amended) On a computer capable of implementing version control, a method comprising:

storing an associative array comprising a plurality of key/value pairs;

providing a version control system on the computer; and

~~creating within the version control system an associative array comprising a collection of keys and corresponding values; and~~

applying a version control operation within the version control system to the associative array to provide version control ~~the collection of keys and corresponding values to at least one of the plurality of key/value pairs of the associative array, the version control system allowing a user to check the associative array in and out of the system and to edit the associative array when it is checked out of the version control system.~~

2. (Currently amended) The method of claim 1, wherein the version control operation includes at least one of ~~add, create, edit, remove, modify, delete, commit, merge, rollback, query, delta or~~ and annotate.

3. (Currently amended) The method of claim 1, further comprising structuring the associative array as a single file and ~~version-controlling the single file and~~ wherein applying a version control operation comprises creating an associative array file within the version control

system in accordance with the single file, where the associative array file is explicitly identified as an associative array within the version control system.

4. (Currently amended) The method of claim 1, further comprising viewing the an associative array as a database record.

5. (Original) The method of claim 1, further comprising organizing a collection of associative arrays as a database table.

6. (Original) The method of claim 5, further comprising a specification file which defines at least one of table characteristics default value or constraints on allowable values.

7. (Original) The method of claim 5, further comprising organizing a collection of database tables as a database.

8. (Original) The method of claim 5, further comprising applying a version control operation to the collection of associative arrays.



14. (Original) The method of claim 1, further comprising automatically resolving a selected conflict, using a merge algorithm having knowledge of the data, occurring in the values of the associative array.

15. (Original) The method of claim 1, further comprising manually resolving a selected conflict occurring in the keys by evaluating historical values of the keys containing the conflict.

16. (Original) The method of claim 1, further comprising version controlling a database containing the associative array.

17. (Original) The method of claim 11, wherein the version controlling of the database is performed utilizing replicated repositories of the version control system.

18. (Cancel) The method of claim 1, further comprising creating within the version control system a plurality of associative arrays.

19. (Currently amended) The method of claim ~~18~~ 1, further comprising:  
replicating ~~the~~ a plurality of associative arrays that have been created within the  
version control system;

checking out and editing at least one of the plurality of associative arrays; and  
committing the edited ~~and unedited~~ plurality of associative arrays back to the  
version control system in such a way that changes to the key/value pairs are correctly handled.

20. (Original) The method of claim 19, further comprising version controlling the plurality of associative arrays in original form prior to the editing of at least one of the plurality of associative arrays.

21. (Original) The method of claim 19, further comprising version controlling the edited and unedited plurality of associative arrays following the committing of the edited and unedited plurality of associative arrays back to the version control system.

22. (Original) An apparatus for implementing version control, comprising:  
means for providing a version control system;  
means for creating within the version control system an associative array  
comprising a collection of keys and corresponding values; and  
means for applying a version control operation to the associative array to version control the collection of keys and corresponding values.

23. (Original) The apparatus of claim 22, further comprising means for organizing a collection of associative arrays as a database table.

24. (Original) The apparatus of claim 22, further comprising means for operating the version control system within a peer-to-peer replicated network with another version control system.

25. (Currently amended) A computer system capable of implementing version control, comprising:

a processor; and

a memory in communication with the processor, the memory having stored thereon a set of data and instructions including a version control system which, when executed by the processor, cause the processor to perform the steps of

creating within the version control system an associative array

comprising a ~~collection of keys and corresponding values~~ plurality of key/value pairs; and

applying a version control operation to the associative array to version control the ~~collection of keys and corresponding values~~ plurality of key value pairs of the associative array and identifying within the version control system that the associate array is an associative array, the version control system allowing a user to check the associative array in and out of the system and to edit the associative array when it is checked out of the version control system.

26. (Original) The computer system of claim 25, further comprising the processor performing the step of organizing a collection of associative arrays as a database table.

27. (Original) The computer system of claim 25, further comprising the processor performing the step of operating the version control system within a peer-to-peer replicated network with another version control system.

28. (Currently amended) A computer system, comprising:  
a first user computer comprising:  
a first version control system accessible by the first user computer;  
means for creating within the first version control system ~~an~~ a first  
associative array having key/value pairs; and  
means for applying a version control operation to the first associative  
array;  
a second user computer networked with the first user computer, each of the first  
user computer and the second user computer capable of operating independently in a peer to peer  
replicated environment in which the first user computer and the second user computer cannot  
communicate for with each other for periods of time, the second user computer comprising:  
a second version control system accessible by the second user  
computer;  
means for creating within the version control system ~~an~~ a second  
associative array having key/value pairs; and  
means for applying a version control operation to the second  
associative array.

29. (Currently amended) The system of claim 28, further comprising means within the version control system for merging an edit made to the first associative array ~~within the first version control system~~ into the second version control system and vice-versa.

30. (Currently amended)) The system of claim 28, further comprising means for resolving a conflict that results from an edit made within ~~either~~ one of the first version control system ~~or~~ and the second version control system.

31. (Original) The system of claim 28, further comprising means for organizing a collection of associative arrays as a database table in the first version control system.

32. (Original) The system of claim 28, further comprising means for organizing a collection of associative arrays as a database table in the second version control system.

33. (Currently amended) A computer readable medium having stored thereon instructions which, when executed by a processor, cause the processor to perform ~~the steps:~~  
~~implementing a version control system on the computer readable medium;~~  
~~creating within the version control system an associative array comprising a~~  
~~collection of keys and corresponding values; and~~  
~~applying a version control operation to the associative array in order to version~~  
~~control the collection of keys and corresponding values.~~



storing an associative array comprising a plurality of key/value pairs;  
providing a version control system on the computer; and  
applying a version control operation within the version control system to the  
associative array to provide version control the at least one of the plurality of key/value pairs of  
the associative array, the version control system allowing a user to check the associative array in  
and out of the system and to edit the associative array when it is checked out of the version  
control system.

34. (Currently amended) The computer readable medium of claim 33, further comprising instructions on the computer readable medium to cause the processor to perform the  
~~processor performing the step of~~ organizing a collection of associative arrays as a database table.

35. (Currently amended) The computer readable medium of claim 33, further comprising instructions on the computer readable medium to cause the processor to perform the  
~~processor performing the step of~~ operating the version control system within a peer-to-peer replicated network with another version control system.

36. (New) The method of claim 1, wherein the version control operation is a delta operation that detects changes between two versions of the associative array and wherein the version control system does not consider changing an order of the key/value pairs to be a change to the associative array by the version control system.

37. (New) The method of claim 1, wherein the version control operation is a delta operation that detects and indicates to a user when a new key/value pair has been added to the associative array

38. (New) The method of claim 1, wherein the version control operation is a delta operation that detects and indicates to a user when a key/value pair has been removed from the associative array

39. (New) The method of claim 1, wherein the version control operation is a delta operation that detects and indicates to a user when a value of a key/value pair has been modified in the associative array

40. (New) The method of claim 1, wherein the version control operation is a commit operation that detects changes between two versions of the associative array and creates a changeset within the version control system and wherein the version control system does not consider changing an order of the key/value pairs to be a change to the associative array by the version control system.

41. (New) The method of claim 1, wherein the version control operation is a commit operation that detects and creates a changeset within the version control system indicating when a new key/value pair has been added to the associative array

42. (New) The method of claim 1, wherein the version control operation is a commit operation that detects and creates a changeset within the version control system indicating when a key/value pair has been removed from the associative array

43. (New) The method of claim 1, wherein the version control operation is a commit operation that detects and creates a changeset within the version control system indicating when a key of a key/value pair has been modified in the associative array

44. (New) The method of claim 1, wherein the version control operation is a delta operation that detects and creates a changeset within the version control system indicating when a value of a key/value pair has been modified in the associative array.

45. (New) The method of claim 1, wherein the version control operation is a query operation that returns the value of a key/value pair having a specified key.

46. (New) On a computer capable of implementing version control, a method comprising:

storing an associative array as an associative array file having a collection of key/value pairs;

providing a version control system on the computer;

using the version control system to allow a user to put the file under version control in a way that lets the version control system know that the file is an associative array file;

allowing the user to check out a first version of the associative array file;

allowing the user to check back in a second version of the associative array file;  
and

outputting differences between the first version of the associative array file and the second associative array file, where changes in order of the keys are not considered by the version control system to be a change.

47. (New) On a computer capable of implementing version control, a method comprising:

storing an associative array as an associative array file having a collection of key/value pairs;

providing a version control system on the computer;

using the version control system to allow a user to put the file under version control in a way that lets the version control system know that the file is an associative array file;

allowing the user to check out a first version of the associative array file;

allowing the user to check back in a second version of the associative array file;

and

creating a changeset indicating differences between the first version of the associative array file and the second associative array file, where changes in order of the keys are not considered by the version control system to be a change.